

What is claimed is:

1. A lyophilized composition of bone morphogenetic factor human MP52, which comprises bone morphogenetic factor human MP52 and mannitol.
2. The lyophilized composition according to claim 1, wherein said bone morphogenetic factor human MP52 and mannitol are mixed at a weight ratio of 1 : 5-50.
3. The lyophilized composition according to claim 1, wherein said bone morphogenetic factor human MP52 is produced by means of a genetic engineering technology.
4. A process for the preparation of a lyophilized composition of bone morphogenetic factor human MP52, which comprises adding mannitol to an aqueous solution of purified bone morphogenetic factor human MP52 and then lyophilizing the resulting aqueous mixture solution.
5. The process for the preparation of the lyophilized composition according to claim 4, wherein said bone morphogenetic factor human MP52 and mannitol are mixed at a weight ratio of 1 : 5-50.
6. The process for the preparation of the lyophilized composition according to claim 4, wherein said bone morphogenetic factor human MP52 is produced by means of a genetic engineering technology.
7. A solution of bone morphogenetic factor MP52, said solution comprising mannitol in a concentration of 0,5 - 5 % (w/v).
8. The solution of claim 7, further comprising a detergent/substance in a concentration of 0.01 to 2.5 % (w/v).
9. The solution of claim 8, wherein the detergent/substance is a polyoxyethylenic detergent/substance.

10. The solution of claim 9, wherein the polyoxyethylenic detergent/substance is Tween, Triton, Brij, or a polyoxyethylene-polyoxypropylene copolymer.

11. The solution of claim 9, wherein the detergent is Tween-5 80.

12. A method for the prevention of coloration of a lyophilized composition of MP52 wherein a solution according to claim 7 is subjected to lyophilisation yielding said lyophilized composition.

10 13. A method for the prevention of shrinking of a lyophilized composition of MP52, wherein a solution according to claim 7 is subjected to lyophilisation yielding said lyophilized composition.

15 14. A method for the prevention of aggregation at the redissolution of lyophilized composition of MP52, wherein a solution according to claim 7 is subjected to lyophilisation yielding said lyophilized composition.